

Application No. 10/789,003
Amendment dated November 8, 2005
Reply to Office Action of August 9, 2005

Docket No.: NY-KIT 365-US

AMENDMENTS TO THE CLAIMS

1. (currently amended) A light source unit comprising
 - a substrate formed of a material having high heat conductivity;
 - a plurality of light emitting diodes (LED's) mounted on the substrate for irradiating beam to an object;
 - a chip resistor mounted on said substrate;
 - light emission controlling means for supplying power to the LED's so as to heat said substrate with heat generated simultaneously with light emission from said LED's;
 - heat generation controlling means for heating the substrate with heat generated in said chip resistor upon supply of power to the chip resistor;
 - temperature determining means for determining a temperature of said substrate; and
 - warm-up controlling means for supplying a predetermined maximum power to said light emission controlling means and said heat generation controlling means at the time of startup of the light source unit until the temperature of the substrate determined by said temperature determining means reaches a predetermined threshold.
2. (original) The light source unit according to claim 1, wherein said plural LED's are arranged in the form of an array on the substrate and a plurality of said chip resistors are arranged linearly along the array of LED's.
3. (original) The light source unit according to claim 1, wherein said substrate includes a metal base, an insulating layer formed on the base, and a printed circuit formed on the top face of the insulating layer, a bounding wiring being provided

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between terminals of the printed circuit and the LED's and said chip resistors being solder-fixed to the terminals of the printed circuit.

4. (original) The light source according to claim 1, wherein said plural LED's are adapted for irradiating at least three kinds of beam of red, green and blue.
5. (canceled)
6. (currently amended) The light source unit according to claim 1, further comprising a radiator thermally coupled with the substrate and a fan for feeding cooling air to the radiator, and fan controlling means operable to drive said fan when the temperature of the substrate determined by said temperature determining means has exceeded a predetermined target temperature range and operable also to stop said fan when the determined temperature falls below said target temperature range.
7. (currently amended) The light source unit according to claim 6~~1~~, wherein said temperature determining means comprises a thermistor mounted on the substrate adjacent the LED.